## Results

Crash Reductions (Using 4.5 Year Before and After Periods)

Total Crashes: 69.2% Reduction (From 13 crashes to 4 crashes)

Target Crashes\*: 90.0% Reduction (From 10 crashes to 1 crash)

Target Injury Crashes: 100.0% Reduction (From 4 crashes to 0 crashes)

Target PDO Crashes: 83.3% Reduction (From 6 crashes to 1 crash)

AADT: 8.5% Increase (From 10,600 vehicles to 11,500 vehicles)

The Treatment Location appears to have had a substantial decrease in both Total and Target Crashes from the before to the after period. The Right Turn Slip Ramp installation in combination with the conversion to an All-Way Stop control appears to have corrected the Left Turn Crash pattern.

Location Photos Taken on March 9, 2006





For the complete project evaluation report and reports on other projects, please go to: http://www.ncdot.org/doh/preconstruct/traffic/Safety/ses/projects/completed.html

North Carolina Department of Transportation Traffic Engineering and Safety Systems Branch Traffic Safety Systems Management Section Safety Evaluation Group

## Evaluation of Spot Safety Project # 09-00-204

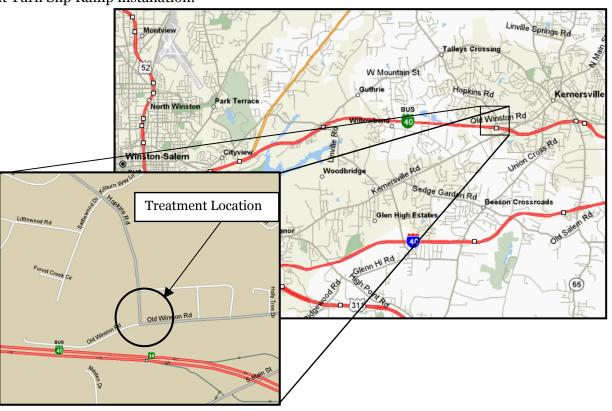
The Installation of a Right Turn Slip Ramp at the Intersection of SR 2649 (Hopkins Rd) And SR 2648 (Old Winston Rd), a Center Turn Lane on SR 2649 (Hopkins Rd), And the Intersection Conversion to All-Way Stop Control

In Forsyth County

The subject intersection is located just north of I-40 Business Exit 14 near Kernersville. This location was originally recognized by Traffic Engineering staff as needing safety improvements because it had experienced 14 Total Crashes in the three year time period between January 1, 1997 and December, 31, 1999. Nine of the 14 crashes were deemed correctable by the improvements.

A majority of traffic entering the intersection travel between westbound SR 2648 (Old Winston Rd) and southbound SR 2649 (Hopkins Rd). Therefore motorists turning left from Hopkins Rd assumed that most westbound Old Winston Rd traffic would turn right and were struck by unanticipated vehicles travelling straight through the intersection. The Right Turn Slip Ramp installation and the conversion to an All-Way Stop were intended to alleviate this crash pattern.

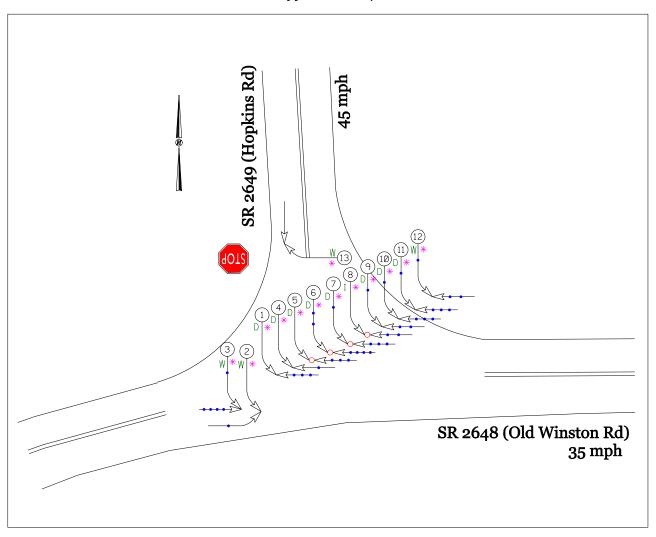
This project was completed on January 25, 2001 at an estimated cost of \$368,600. Spot Safety funds were used for approximately 25 percent of the project cost, with the remaining funds provided by the Town of Kernersville. The Spot Safety funds appear to be used primarily for the Right Turn Slip Ramp installation.



<sup>\*</sup> Target Crashes include Left Turn-Different Roadway Crashes involving a left turning vehicle from Hopkins Rd and a westbound vehicle on Old Winston Rd.

## Before Period Collision Diagram

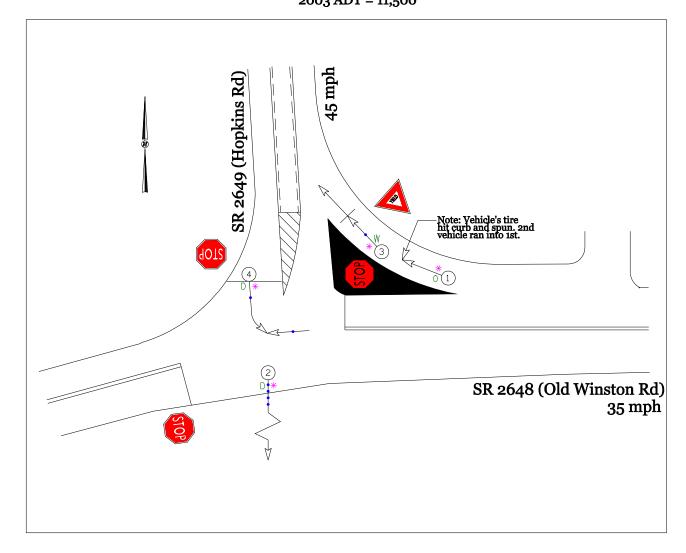
April 1, 1996 through September 30, 2000 (4.5 Years of Crash Data) 1998 ADT = 10,600



- 13 Total Crashes
- 12 Left Turn-Different Roadway Crashes
- 1 Right Turn-Different Roadway Crash
- 10 Target Crashes\*
- 4 Target Injury Crashes Including 2 Class-A, 1 Class-B, and 1 Class-C Injury Crashes
- 6 Target PDO Crashes

## After Period Collision Diagram

May 1, 2001 through October 31, 2005 (4.5 Years of Crash Data) 2003 ADT = 11,500



- 4 Total Crashes
- 1 Left Turn-Different Roadway Crash
- 1 Rear End Crash
- 1 Run Off Road Crash
- 1 Other Collision With Vehicle Crash
- 1 Target Crash\*
- o Target Injury Crashes
- 1 Target PDO Crash

<sup>\*</sup> Target Crashes are deemed correctable by the Right Turn Slip Ramp treatment.

For this evaluation, Target Crashes include Left Turn-Different Roadway Crashes that involve a left turning vehicle from Hopkins Rd and a westbound vehicle on Old Winston Rd.